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IN THE APPLICATION

OF

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FOR AN

ATTACHMENT TO MOTORCYCLE TO SAFELY TRANSPORT MUSICAL

INSTRUMENTS

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ATTACHMENT TO MOTORCYCLE TO SAFELY TRANSPORT MUSICAL

INSTRUMENTS

BACKGROUND OF THE INVENTION

1. FIELD OF THE INVENTION

The present invention relates to motorcycle mounting brackets. More particularly, the present invention relates to a system for safely transporting a guitar or the like having a quick-release bracket for attachment to a motorcycle.

2. DESCRIPTION OF THE RELATED ART

The use of quick-release brackets for mounting various items on a motorcycle is known. Such brackets are particularly useful for saddlebags, seat supports or the like and may be mounted to the rear frame or a fender bar. The carrying of bulky musical instruments is a challenge when a motorcycle is used, leading to instrument damage and safety concerns by the rider. The musical instrument is preferably carried in a case

for protection and ease in carrying, during both transportation and hand carrying to the location of use. It would be desirable to provide a quick-release bracket and mountings for effective mounting and easy dismounting of a musical instrument case while safely carrying a musical instrument inside the case.

U.S. Patent Publication No. 2003/0057242 B1, published March 27, 2003, for Schurr, describes a motorcycle golf bag carrier used in conjunction with a saddlebag mounting system to connect and transport a user's golf bag on a motorcycle. The carrier is vertically attached to the side of a motorcycle by means of frame-mounted brackets.

U.S. Patent No. 3,938,719, issued February 17, 1976, to Carlton, describes a storage device for motorcycles and like vehicles. This storage device is used for transporting goods such as sporting equipment and grocery parcels, etc. The device includes a container for goods and an attachment system for detachably securing the container to a motorcycle.

U.S. Patent No. 5,558,260, issued September 24, 1996, to Reichert, describes a quick-release type mounting for attachment of a passenger seat rack having a rotating bracket engaging a support post mounted on a rear side frame of a motorcycle.

U.S. Patent No. 6,484,914 B1, issued November 26, 2002, to Wiley, describes a mounting system for an accessory where latching frames are connected to fender rails or the like by two posts. On each side of the motorcycle, a lateral groove of 5 the latching frames first engages a front post on the fender rail and the latching frames rotated downward such that a vertical groove engages a rear post.

U.S. Patent No. 6,293,450 B1, issued September 25, 2001 to Aron, describes a motorcycle fender rail having quick-release 10 posts for attachment of a bracket bearing a saddlebag.

U.S. Patent No. 6,591,193, issued December 10, 2002, to Dudek et al., describes a motorcycle luggage accessory. This device is a lumbar support and is removably secured longitudinally, laterally, and vertically to the back of a 15 motorcycle. This luggage accessory serves as a backrest for the rider and as well as a means for storing personal effects.

None of the above inventions and patents, taken either singly or in combination, is seen to describe the instant invention as claimed. Thus, an attachment to a motorcycle to 20 safely transport musical instruments solving the aforementioned problems is desired.

SUMMARY OF THE INVENTION

The present invention is a bracket system for safely and securely mounting a musical instrument case to a motorcycle and allowing for ease of dismounting the case upon arrival at a location of instrument use or storage. The inventive system includes two grooved mounting posts and a mounting spool attached to the frame, rear fender, or rear fender rail of the motorcycle, and a bracket system mounted on the musical instrument case to removably receive the mounting posts and spool.

The two mounting posts are mounted horizontally along the length of the frame or fender, one being forward mounted and the other being rearward mounted. The system has a first bracket having an end-located post receiver groove and a vertical post receiver groove opening downward for engaging the two posts. By sliding the end-located post receiver groove over the forward post followed by rotational engagement of the rearward post by the downward opening post receiver groove of the second bracket the case is installed on the posts.

The system also has a second bracket mounted at a location on the same side of the case and spaced forward of the first bracket, the second bracket having an upward-opening spring

biased quick-release docking latch so mounted as to securely engage and disengage a spool mounted on the motorcycle. In a preferred embodiment, the two grooved posts are screw-mounted to the rear frame of the motorcycle, while the spool is mounted 5 to the frame at a location proximate the rear of the motor via a front bracket support extending between the frame and the spool mounting point. The length and location of mounting of the front bracket support is determined by the configuration of the particular motorcycle. The second bracket is located 10 forward on the instrument case relative to the first bracket as mounted on the corresponding spool and grooved posts, respectively. The case is removed by releasing the spring biased docking latch, rotating the case around the forward mounted grooved post so as to disengage the first and second 15 brackets from their respective spool and rearward post, and lifting the case up and away from the forward post and the motorcycle.

Accordingly, it is a principal object of the invention to provide a system for securely carrying a musical instrument or 20 the like on a motorcycle.

It is another object of the invention to provide a system as above having a bracket system for mounting and dismounting a musical instrument case holding and instrument therein.

It is another object of the invention to provide a system as above having a quick-disconnect feature for secure mounting and easy, quick-disconnect of the instrument case relative to the motorcycle.

5 It is a further object of the invention to provide a system as above having grooved mounting posts and a mounting spool inconspicuously mounted on the motorcycle for receiving a bracket system mounted on a side of the instrument case.

10 Still another object of the invention is to provide a system as above having spring loaded quick-disconnect latch mounted on a forward portion of the instrument case as mounted.

15 It is an object of the invention to provide improved elements and arrangements thereof for the purposes described which is inexpensive, dependable and fully effective in accomplishing its intended purposes.

These and other objects of the present invention will become readily apparent upon further review of the following specification and drawings.

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BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is an environmental, perspective view of the musical instrument case as mounted to motorcycle to safely

transport musical instruments according to the present invention.

Fig. 2 is an exploded view of the instrument case of Fig. 1, showing the instrument and protective bag for installation 5 of the instrument within the case.

Fig. 3 is a side elevation view of the rear portion of a motorcycle showing the grooved mounting posts and mounting spool of the system of Fig. 1 as mounted to the motorcycle.

Fig. 4 is an exploded view of the mounting posts, mounting 10 spool, front bracket support, and first and second mounting brackets of Fig. 1 as exploded away from the rear portion of a motorcycle.

Fig. 5 is a side elevation view of a musical instrument case of Fig. 1 with first and second mounting brackets mounted 15 on one side of the case.

Fig. 6A is a perspective view of the first mounting bracket and spring loaded quick-disconnect latch of Fig. 1, the latch shown in a closed position over the spool.

Fig. 6B is a perspective view of the first mounting 20 bracket and spring loaded quick-disconnect latch of Fig. 1, the latch shown in the open position with the spool exploded away.

Fig. 7 is a perspective view of the second mounting bracket of Fig. 1 having lateral and downward opening grooves with the grooved posts exploded away.

Fig. 8 is a side elevation view similar to that of Fig. 3
5 where the mounting posts are mounted on a fender rail.

Similar reference characters denote corresponding features consistently throughout the attached drawings.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

10 The present invention a bracket system for safely and securely mounting a musical instrument case to a motorcycle and allowing for ease of dismounting the case upon arrival at a location of instrument use or storage.

15 Referring to the Figures, the quick-release bracket system for mounting a musical instrument case or the like for safe, secure transport of a musical instrument on a motorcycle generally referred to by the reference number 10. As seen in Fig. 1, case C is in the form of a guitar and is mounted to the frame F of motorcycle M at its rear portion. First mounting bracket 20 is engaged with front mounting post 12 and rear mounting post 14 which are, in turn mounted to the rear frame 20 or fender of motorcycle M (see Fig. 3).

Second bracket 30 is spaced forward of and generally downward from first bracket 20 having quick-disconnect docking latch 34 engaging mounting spool 16 attached to the rear end portion of front lower bracket support 40. Lower bracket support is attached to frame F of motorcycle M at a convenient point to the rear of the transmission of the motorcycle. The location of the first bracket 20, the second bracket 30, and the point of attachment of lower bracket support 40 on a motorcycle M may vary depending upon the configuration of the particular motorcycle used.

In differing applications, bracket support 40 may not be necessary as the mounting spool 16 could be otherwise attached to the motorcycle. Similarly, it is possible that bracket supports similar to bracket support 40 may be necessary as intermediate structure for supporting front mounting post 12 and rear mounting post 14. Such configurations should be considered to be within the scope of the present invention.

As illustrated in Fig. 2, a musical instrument G such as a guitar may be placed in a protective bag B made of a cushioning material such as foam material and placed for transport and storage in case C.

Referring to Figs. 3 and 4, there is shown a side elevation and an exploded view of the hardware mountings and

engaging brackets, respectively. The engaging brackets may be attached to the back of the case **C** by gluing, fasteners, or a combination thereof. Mounting posts **12** and **14** are of chrome plated or stainless steel and have circumferential grooves **13** therein for receiving first bracket **20**. The grooves are preferably lined with elastomeric material having high impact qualities for quiet and snug fit. Posts **12** and **14** are attached by screws **15** (not to scale) to frame **F** through rear fender **RF** by means of holes **19**, bored therethrough. Alternatively, posts **12** and **14** may be directly attached to rear fender **RF** in a similar manner.

Front end groove **22** of first bracket **20** receives forward post **12** upon mounting and then the bracket is rotated downward, downward opening vertical groove **24** receiving rear post **14**, forming a stable mounting for first bracket **20** and the back of case **C** attached thereto. Lower front bracket support **40** is in the form of an elongated flat or strut, mounted to frame **F** by mounting bolt **42** at frame throughbore **44**. Bolts and screws may be received in frame **F** in tapped bores, or appropriately positioned threaded nuts (not shown). The mounting spool **16** is made of chrome plated or stainless steel and is mounted to the free end of bracket support **40** by spool mounting screw **18** affixed in receiving bore **46**. Second mounting bracket **30** is

mounted by fasteners (not shown) to the forward back portion of case **C** with upward opening post receiving groove **32** having quick-release, spring biased latch **34** attached for engagement with mounting post **16**.

5 As best seen in Figs. 5, 6A, and 6B there is illustrated the second bracket **30** attached to the back of case **C** near the base, thereof. Second bracket **30** has mounting bores **31** for fasteners (not shown) mounting bracket **30** to case **C**. A spacer (not shown) may be placed between bracket **30** and the back wall 10 of case **C** to allow space to receive the free end of mounting spool **16**. Docking latch **34** has a main body mounted on pivot **35** for rotation between an open and closed position. Docking latch **34** has an upward opening groove **36** having a spring biased latch member **38** for securing spool **16** in groove **36** (see Fig. 15 6A). Docking latch **34** has a release crank **39** extending below the lower edge of bracket **30** having knurls to receive the user's thumb or finger to rotate latch **30** to an open position releasing spool **16** (see Fig. 6B). The docking latch **34** is commercially available, having Harley-Davidson Part No. 553542-20 95. The mounting posts **12** and **14**, and the mounting spool **16** are also common Harley-Davidson parts, made of stainless or chrome steel and a hard plastic.

Referring particularly to Figs. 5 and 7, first bracket 20 is attached to the back of case C by gluing or other means (not shown) and has a generally downward post receiving slot 24 having a retaining rim 26 which is received in the slot 13 of rear mounting post 14. A forward end groove 22 has a retaining rim 28 for receiving the slot 13 of forward post 12.

Referring to Fig. 8, there is shown mounting posts 12 and 14 mounted on a fender rail R attached to frame F for receiving first bracket 20. In this embodiment, the bracket 20 may be mounted lower on the back of case C as appropriate. Fender rail R is a common motorcycle part made of chrome steel or stainless steel.

The mounting bracket 20 is preferably made of high-impact plastic and mounted on the back of case C by adhesive in a known manner. In a production model the bracket 20 may be molded as part of the case C. The mounting bracket 30 is preferably made of stainless steel or chrome steel. The lower bracket support 40 is preferably made of stainless steel or chrome steel. Fasteners are preferably made of stainless steel.

It is to be understood that the present invention is not limited to the embodiments described above, but encompasses any and all embodiments within the scope of the following claims.